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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,536	04/01/2004	Ronald S. Cok	85285AAJA	4880

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EXAMINER	
FARAHANI, DANA	

ART UNIT	PAPER NUMBER
2891	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SPM

Office Action Summary	Application No.	Applicant(s)	
	10/817,536	COK, RONALD S.	
	Examiner	Art Unit	
	Dana Farahani	2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 6 and 9 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art (AAPA).

Regarding claim 1, AAPA discloses in figure 3, a top-emitting OLED display comprising:

a) a substrate 20;

b) an array of OLED light emissive elements 10 formed over the substrate;

c) an encapsulating cover 38 located over the OLED light emissive

d) a circular light polarizer 50 located between the encapsulating cover and the OLED light emissive elements.

Regarding claim 6, the circular light polarizer is attached to the OLED light emissive elements by means of layer 36.

Regarding claim 9, the cover hermetically sealed to the substrate by means of element 36 (and 50), which covers the entire display.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2-5, 7, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA as applied to claim 1 above, and further in view of Van Hal et al., hereinafter Van (US Patent Application Publication 2002/0172839).

Regarding claims 2 and 3, AAPA discloses the limitations in the claims, as discussed above, except for the encapsulating cover defines a cavity over the OLED elements and the circular light polarizer is attached to the encapsulating cover inside the cavity.

Van discloses in figure 1, an encapsulating cover 7 defines a cavity 8 over the OLED's 3. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to make a cavity with a cover over the OLED of the device of the AAPA in order to avoid direct contact with the light emitting layer.

Regarding claims 4 and 5, AAPA in view of Van discloses the limitations in the claims, as discussed above, except for the cavity being filled with an inert gas or a transparent solid.

AAPA discloses in figure 2, the cavity 34 is filled with an inert gas or a transparent solid (see page 4, line 18). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to fill the cavity of the device of the AAPA in view of Van with an inert gas or a transparent solid in order to affect the properties of the emitted light from the OLED layer.

Regarding claims 7 and 8, the cover 7 of the Van reference is a flat plate which is sealed to the perimeter of the substrate 2 by means of adhesive 6, which is thermosetting two-component epoxy resin (it absorbs light).

Regarding claims 10 and 11, a desiccant material 9 is located around a periphery of the cover 7 in the Van reference. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a desiccant material around the periphery of the cover in order to prevent moisture from damaging the OLED layer.

5. Claims 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA as applied to claim 1 above, and claim 14, and further in view of Chan (US Patent 5,055,894).

AAPA discloses the claimed invention, as discussed above, except for an anti-reflective coating applied to a side of the encapsulating cover.

Chan discloses in figure 17 an anti-reflective coating layer 106 is formed over light emitting diodes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an anti-reflective layer on the encapsulating cover in the structure of AAPA, in order to increase light emitting efficiency of the device.

6. Claims 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Chan as applied to claim 12 above, and claim 14, and further in view of Van.

AAPA in view of Chan discloses the limitation in the claim, as discussed above, except for an environmental protection coating provided over or with the antireflective coating.

Van discloses an environmental protection coating 9 is provided with the cover 7, as discussed above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an environmental protection coating with the cover, and the anti-

reflective coating of the device of AAPA in view of Van in order to prevent moisture from damaging the OLED layer therein.

7. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA.

Regarding claim 14, AAPA discloses the limitations in the claim, as discussed above with respect to claim 1, except for a material located adjacent to the first surface layer of the circular light polarizer having a refractive index matched more closely than air to the reflective index of the first surface layer of the circular light polarizer. AAPA however, discloses material 36 adjacent to the circular light polarizer. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the reflective index of the layer 36 match the reflective index of the polarizer so as not to interfere with the direction of the emitted light from the polarizer.

Regarding claim 15, an adhesive 70 is applied to the circular light polarizer to adhere a second surface of the polarizer to the array of LEDs.

Regarding claim 16, AAPA discloses the limitations in the claim, as discussed above, but does not disclose an adhesive is applied to the polarizer to adhere a second surface of the polarizer to the encapsulating cover. It would have been obvious to one of ordinary skill in the art to use an adhesive to further secure the polarizer to the encapsulating cover.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Farahani whose telephone number is (571)272-1706. The examiner can normally be reached on M-F 9:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on (571)272-1722. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Farahani

DAVID ZARNEKE
PRIMARY EXAMINER
4/29/05